

**S/N 10/081,818**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Jerome M. Eldridge et al.

Examiner: Tu-Tu Ho

Serial No.: 10/081,818

Group Art Unit: 2818

Filed: February 20, 2002

Docket: 1303.045US1

Customer No.: 73115

Confirmation No.: 3148

Title: ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW  
ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(c)(2), Applicants hereby authorize the Commissioner to charge the fee of \$180.00 as set forth in 37 C.F.R. §1.17(p), to Deposit Account No. 19-0743. Please charge any additional fees or credit any overpayment to Deposit Account No. 19-0743.

Applicant brings to the attention of the Examiner the following Office Actions and responses associated with one or both of the inventors of the instant application and/or the assignee of the instant application. This material is available and accessible at the United States Patent and Trademark Office.

**FLASH MEMORY WITH LOW TUNNEL BARRIER INTERPOLY INSULATORS**

Application Serial No. 10/931,704 (Atty Ref 1303.014US2 ), Notice of Allowance mailed 1-31-08, 7 pgs  
Application Serial No. 10/931,704 (Atty. Ref.1303.014US2 ) Notice of Allowance mailed 06-06-08, 6 pgs

**SRAM CELLS WITH REPRESSED FLOATING GATE MEMORY, LOW TUNNEL BARRIER  
INTERPOLY INSULATORS**

Application Serial No. 11/062,543 (Atty Ref 1303.028US2), Notice of Allowance mailed 01-31-2008, 13  
pgs  
Application Serial No. 11/062,543 (Atty Ref 1303.114US), Notice of Allowance mailed 05-29-2008, 11 pgs

Title: ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS

**PROGRAMMABLE ARRAY LOGIC OR MEMORY WITH P-CHANNEL DEVICES AND ASYMMETRICAL TUNNEL BARRIERS**

Application Serial No. 11/471,008 (Atty. Ref. 1303.035US3) Notice of Allowance mailed 02-13-2008, 13 pgs

**ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS**

Application Serial No. 10/081,818 (Atty Ref 1303.045US1) Response filed 8-24-2006 to Non Final Office Action mailed 3-24-2006, 11 pgs

**ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS**

Application Serial No. 10/929,986 (Atty Ref 1303.045US2), Restriction Requirement mailed 10-12-05, 6 pgs

Application Serial No. 10/929,986 (Atty Ref 1303.045US2), Response filed 11-10-05 to Restriction Requirement mailed 11-10-05, 19 pgs

Application Serial No. 10/929,986 (Atty Ref 1303.045US2), Notice of Allowance mailed 2-28-08, 7 pgs

**ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS**

Application Serial No. 11/380,599 (Atty Ref 1303.045US3), Restriction Requirement mailed 01-30-07, 5 pgs

Application Serial No. 11/380,599 (Atty Ref 1303.045US3), Response filed 02-26-07 to Restriction Requirement mailed 01-30-07, 6 pgs

Application Serial No. 11/380,599 (Atty. Ref. 1303.045US3) Notice of Allowance mailed 06-05-08, 9 pgs

**DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS**

Application Serial No. 11/704,458 (Atty Ref 1303.045US4), Response filed 1-29-08 to Non-Final Office Action mailed 11-1-07, 15 pgs

Application Serial No. 11/704,458 (Atty Ref 1303.045US4) Final Office Action mailed 03-14-08, 16 pgs

Application Serial No. 11/704,458 (Atty Ref 1303.045US4), Response filed 5-6-08 to Final Office Action mailed 3-31-08, 11 pgs

**LOW TUNNEL BARRIER INSULATORS**

Application Serial No. 11/708,438 (Atty Ref 1303.045US5), Response filed 1-29-08 to Non-Final Office Action mailed 10-29-07, 11 pgs

Application Serial No. 11/708,438 (Atty. Ref. 1303.045US5) Notice of Allowance mailed 03-17-08, 7 pgs

**ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS**

Application Serial No. 11/728,671 (Atty. Ref. 1303.045US6) Non-Final Office Action mailed 03-17-2008, 51 pgs

**GERMANIUM-SILICON-CARBIDE FLOATING GATES IN MEMORIES**

Application Serial No. 11/063,825 (Atty Ref 1303.132US1), Response filed 1-30-08 to Final Office Action mailed 11-30-07, 11 pgs

Application Serial No. 11/063,825 (Atty Ref No. 1303.132US1), Amendment filed with RCE, 12 pgs

Application Serial No. 11/063,825 (Atty. Ref. 1303.032US1) Non-Final Office Action mailed 05-13-2008., 9 pgs

**GERMANIUM-SILICON-CARBIDE FLOATING GATES IN MEMORIES**

Application Serial No. 11/731255 (Atty. Ref. 1303.132US3 ), Non-Final Office Action Mailed 05-29-2008, 23 pgs

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

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**Title: ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS**

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**HAFNIUM TITANIUM OXIDE FILMS**

Application Serial No. 11/140,643, (Atty Ref 1303.141US1) Response filed 6-9-2006 to Non-Final Office Action mailed 3-9-2006, 16 pgs

Application Serial No. 11/140,643, (Atty Ref 1303.141US1) Restriction Requirement mailed 8-22-2006, 5 pgs

Application Serial No. 11/140,643, (Atty Ref 1303.141US1) Response filed 9-18-2006 to Restriction Requirement mailed 8-22-2006, 11 pgs

Application Serial No. 11/140,643, (Atty Ref 1303.141US1) Response filed 2-12-2007 to Final Office Action mailed 12-13-2006, 16 pgs

Application Serial No. 11/140,643, (Atty Ref 1303.141US1) Advisory Action mailed 3-1-2007, 2 pgs

Application Serial No. 11/140,643, (Atty Ref 1303.141US1) Response filed 3-13-2007 to Advisory Action mailed 3-1-2007, 19 pgs

Application Serial No. 11/140,643, (Atty Ref 1303.141US1) Response filed 8-31-2007 to Non-Final Office Action mailed 6-4-2007, 13 pgs

Application Serial No. 11/140,643, (Atty Ref 1303.141US1) Advisory Action mailed 2-13-2008, 3 pgs

Application Serial No. 11/140,643 (Atty Ref 1303.141US1) Amendment under CFR filed 2-22-08, 19 pgs

Application Serial No. 11/140,643 (Atty. Ref.1303.141US1) Notice of Allowance mailed 05-16-2008, 12 pgs

**HAFNIUM TITANIUM OXIDE FILMS**

Application Serial No. 11/565,826, (Atty Ref 1303.141US2) Preliminary Amendment filed 12-13-2007, 6 pgs

Application Serial No. 11/565,826(Atty. Ref. 1303.141US2), Non-Final Office Action mailed 02-13-2008, 22 pgs

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications, and Non-Published Applications identifiable by USPTO Serial Number, are no longer required to be provided to the Office. Notification of this change to this effect was provided in the United States Patent and Trademark Office OG Notice dated October 19, 2004. Thus, Applicant has not included copies of any US Patents or US Patent Applications identifiable by serial number that may be cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.  
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Date JUNE 16/2008 By Robert B. Madden  
Robert B. Madden  
Reg. No. 57,521

TBC:jld

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 16 day of June, 2008.

Leshere Wolfe  
Name

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Signature